

SEVERE LOCAL STORMS, OCTOBER, 1923.

(The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A more complete statement will appear in the Annual Report of the Chief of Bureau.)

Place.	Date.	Time.	Width of path (yards).	Loss of life.	Value of property destroyed.	Character of storm.	Remarks.	Authority.
Louisiana and adjacent Gulf coast.	15-17	.....	.....	.....	\$19,300	High winds and tides.	Damage principally to crops and immovable property, such as docks, piers, wharves, etc. Serious interruption to maritime traffic.	Advertiser (Montgomery, Ala.) Official, U. S. Weather Bureau.
Chicago, Ill.	17-18	.....	.....	.....	.....	Moderate gale.	Slight property damage. Two persons injured.	Official, U. S. Weather Bureau. Daily Journal (Chicago, Ill.).
Coney Island, N. Y.	18	P. m.	.....	2	.....	High wind.	Fishing smack <i>Halcyon</i> wrecked. Survivors brought ashore after hard fight.	Times (New York).
Middle Atlantic coast.	22-24	.....	.....	.....	.....	High winds and rain.	Shipping activities paralyzed; some damage to small craft and a number of persons injured.	Official, U. S. Weather Bureau. The Evening World (New York).
Cleveland, Ohio.	24	A. m.	.....	.....	.....	Gale and rain.	Trees uprooted, wires and windows broken and shipping delayed. Several accidents.	News (Cleveland, Ohio).

STORMS AND WEATHER WARNINGS.

WASHINGTON FORECAST DISTRICT.

The weather conditions over the States east of the Mississippi River during the first two weeks of the month were dominated practically the entire time by an area of high pressure of great magnitude that moved very slowly southeastward from Manitoba to the Atlantic States. However, after the 9th pressure gradually decreased over the western Caribbean Sea, Mexico, and the southwestern Gulf of Mexico and there were torrential rains in portions of Mexico. At Acapulco, over 19 inches of rain fell within six days. By the 14th the barometer was falling slowly along the Texas coast, and on the morning of the 15th a disturbance of moderate intensity extended all the way from Vera Cruz and Frontera, Mexico, northward over the western Gulf of Mexico to the Texas and Louisiana coasts, with the center apparently some distance east of the mouth of the Rio Grande. This disturbance, in connection with the area of high pressure over the eastern States, produced a rather steep pressure gradient, so that small-craft warnings were ordered displayed along the Mississippi, Alabama, and northwestern Florida coasts at 10 a. m. At 12:30 p. m. the district forecaster at New Orleans ordered southeast storm warnings on the Louisiana coast and northeast warnings on the Texas coast.

The regular evening reports from the stations along the Gulf coast showed that the disturbance had increased considerably in intensity during the day and that it was moving northward toward the Louisiana coast. At 8:45 p. m. the display stations along the east Gulf coast from Bay St. Louis, Miss., to Cedar Keys, Fla., were ordered to hoist northeast storm warnings at 9:30 p. m. Shortly after this order was telegraphed to the stations concerned, radio reports were received from the S. S. *El Siglo* in lat. 28° 20' N., long. 92° W., and from the S. S. *Corning* in lat. 27° 20' N., long. 91° 30' W., indicating that the storm had developed hurricane intensity. The former reported a barometer reading of 29.22 inches and a wind velocity of 74 miles an hour from the east, and the latter a barometer reading of 29.18 inches and a wind velocity of 64 miles an hour from the east, with a two-hour pressure fall of 0.20 inch. As soon as these extremely important and timely vessel reports were charted and the storm center located at about lat. 27° N., long. 92° W., hurricane warnings were ordered displayed at 10 p. m. along the Louisiana, Mississippi, Alabama, and extreme northwestern Florida coasts. Ten p. m. and midnight special observations were called for from several of the stations along the Gulf coast, and an advisory

message was issued at 12:45 a. m. of the 16th informing the stations in the area affected that the storm center would likely reach the Louisiana coast not far from Morgan City between 4 and 6 a. m. The lowest pressure noted at Morgan City was 29.25 inches. The hurricane, which was of small diameter and not of great intensity, moved quite rapidly northward and its center was a short distance southwest of Vicksburg, Miss., at 8 a. m., this station reporting a barometer reading of 29.32 inches with a two-hour pressure fall of 0.20 inch and a wind velocity of 32 miles an hour from the southeast.

Extracts from press reports of the storm in the Times-Picayune, New Orleans, are as follows:

PENSACOLA, FLA., Oct. 16.—* * * Aside from the dragging of anchors by several tank ships anchored here, damage was confined in the harbor to the beaching of a number of loaded lumber and naval stores barges. Five hundred barrels of rosin were on one barge which went down. An even dozen barges were beached, more than half of them carrying lumber, and cargoes were scattered all along the beach and more or less damaged. * * *

GULFPORT, MISS., Oct. 16.—* * * Shipping in the Gulfport Harbor escaped damage, all the larger vessels remaining safely moored * * * but some of the trawl boats and other small craft which sought refuge in the basin were either sunk or driven on the beach. * * *

The highest wind velocities reported, all from the southeast, were as follows: New Orleans, La., 36 miles an hour; Burrwood, La., 48; Mobile, Ala., 60; and Pensacola, Fla., 64.

Pressure remained quite low over the Gulf of Mexico after the hurricane moved inland, and the barometer again fell over the western Caribbean Sea, and there was evidence that a disturbance was forming between the Island of Jamaica and the Isthmus of Panama. At 5:30 p. m. of the 17th southeast storm warnings were ordered displayed from Bay St. Louis, Miss., to Apalachicola, Fla., as another disturbance was approaching the middle Gulf coast. At 8 p. m. its center was between Mobile and New Orleans, and shortly thereafter a maximum wind velocity of 44 miles an hour from the southeast was registered at Mobile and 56 miles an hour from the southeast at Pensacola. This storm moved rapidly northward to the middle Mississippi Valley, then north-northeastward to the Hudson Bay region.

Over the western Caribbean Sea pressure continued low with some evidence of a slight disturbance central southwest of Jamaica. Following a slight rise in pressure over the western Caribbean Sea, Cuba, and the vicinity of the Bahama Islands on the 20th, the barometer again began to fall over Cuba and the Bahamas region during the 21st, and by the morning of the 22d a disturbance of slight intensity had developed with its center near Nassau, Bahama Islands. At this time there was an area of high pressure of great magnitude overlying all